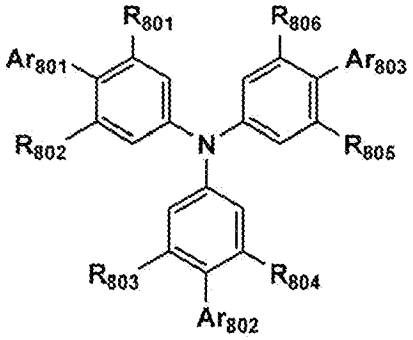
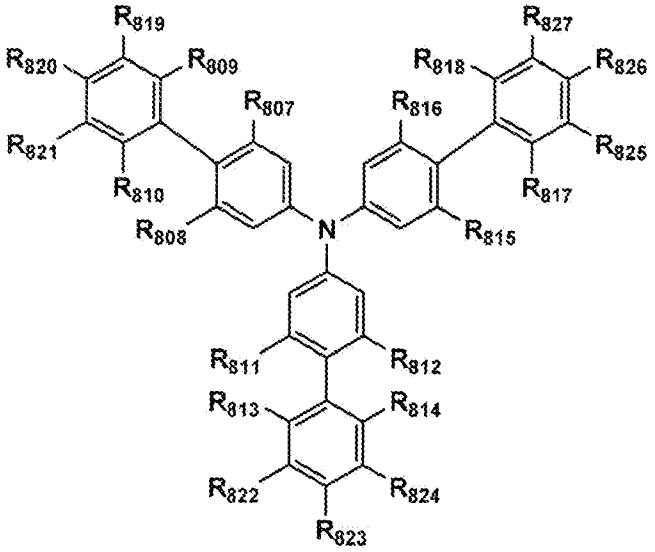
IN THE CLAIMS

1. (Previously Presented) An organic electroluminescent element comprising a light emission layer containing a phosphorescent compound and a hole transporting layer adjacent thereto containing a hole transporting material, wherein the hole transporting material has a 0-0 band of the phosphorescence spectra of from 300 to 450 nm and has a molecular weight of not less than 550, and is a triarylamine compound represented by the following Formula 4-1 or 4-2:

Formula 4-1



Formula 4-2



wherein Ar_{801} through Ar_{803} independently represent a substituted or unsubstituted aryl group or a substituted or unsubstituted heteroaryl group; and R_{801} through R_{827} independently represent a hydrogen atom or a substituent, provided that at least one of R_{801} and R_{802} is a substituent, at least one of R_{803} and R_{804} is a substituent, at least one of R_{805} and R_{806} is a substituent, at least one of R_{807} through R_{810} is a substituent, at least one of R_{811} through R_{814} is a substituent, and at least one of R_{815} through R_{818} is a substituent.

2. (Original) The organic electroluminescent element of claim 1, wherein the hole transporting material has an ionization potential Ip1 of from 5.00 to 5.70 eV.

3. (Original) The organic electroluminescent element of claim 1, wherein

$-0.1\ (eV) \leq Ip3-Ip1 \leq 0.5\ (eV)$

where Ip1 (eV) represents the ionization potential of the hole transporting material, and Ip3 (eV) represents the ionization potential of the phosphorescent compound.

4. (Original) The organic electroluminescent element of claim 1, wherein

$0.5\ (eV) < T3- Ea1 < 1.3\ (eV)$

where T3 (eV) represents the excited triplet energy level of the phosphorescent compound and Ea1 (eV) represents the electron affinity of the hole transporting material.

5. (Original) The organic electroluminescent element of claim 1, wherein the phosphorescent compound has a phosphorescence maximum in the wavelength regions of from 380 to 480 nm.

6. (Original) The organic electroluminescent element of claim 1, further comprising a second hole transporting layer containing a second hole transporting material, the second hole transporting layer being provided on the surface of the hole transporting layer opposite the light emission layer, wherein

$0.1\ (eV) < Ip1 - Ip4 < 0.7\ (eV)$

where Ip1 (eV) represents the ionization potential of the hole transporting material, and Ip4 (eV) represents the ionization potential of the second hole transporting material.

7. (Original) The organic electroluminescent element of claim 6, wherein the thickness of the hole transporting layer adjacent to the light emission layer is from 5 to 20 nm.

8. (Original) The organic electroluminescent element of claim 1, wherein the light emission layer further contains a host compound.

9. (Original) The organic electroluminescent element of claim 8, wherein

$0.3\ (eV) < Ip2 - Ip1 < 1.0\ (eV)$

where Ip1 (eV) represents the ionization potential of the hole transporting material and Ip2 (eV) represents the ionization potential of the host compound.

10. (Original) The organic electroluminescent element of claim 8, wherein

0.1 (eV)< Ea2 – Ea1 <0.8 (eV)

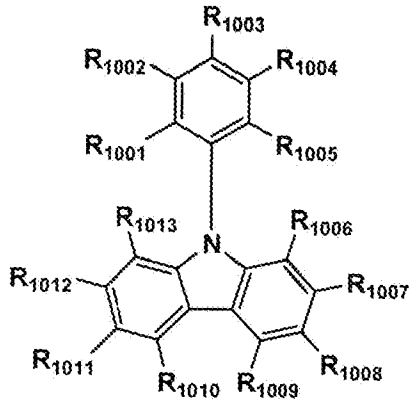
where Ea1 (eV) represents the electron affinity of the hole transporting material and Ea2 (eV) represents the electron affinity of the host compound.

11. (Original) The organic electroluminescent element of claim 8, wherein the host compound has a 0-0 band of the phosphorescence spectra of from 300 to 450 nm.

12. (Original) The organic electroluminescent element of claim 8, wherein the host compound is a carbazole derivative.

13. (Original) The organic electroluminescent element of claim 12, wherein the carbazole derivative is a compound represented by the following formula 11,

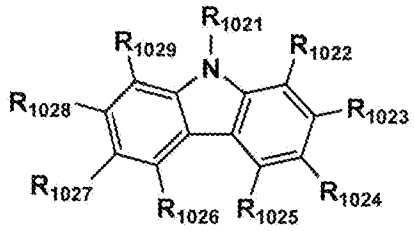
Formula 11



wherein R_{1001} through R_{1013} independently represent a hydrogen atom or a substituent, provided that at least one of R_{1001} through R_{1013} is a substituent.

14. (Original) The organic electroluminescent element of claim 12, wherein the carbazole derivative is a compound represented by the following formula 12,

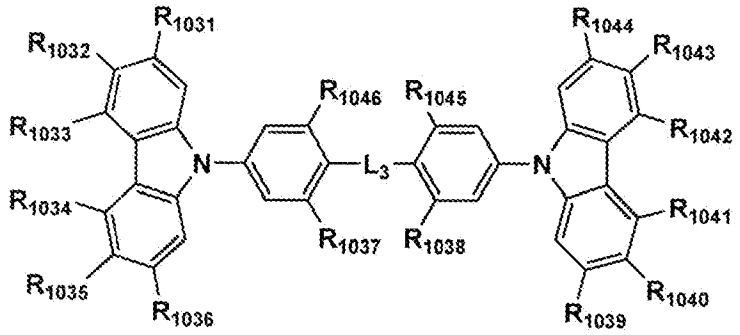
Formula 12



wherein R_{1021} represents an alkyl group, a cycloalkyl group or a fluoroalkyl group; and R_{1022} through R_{1029} independently represent a hydrogen atom or a substituent, provided that at least one of R_{1022} through R_{1029} is a substituent.

15. (Original) The organic electroluminescent element of claim 12, wherein the carbazole derivative is a compound represented by the following formula 13,

Formula 13

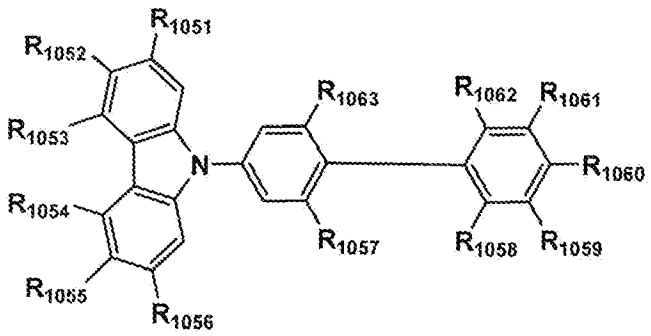


wherein R_{1031} through R_{1046} independently represent a hydrogen atom or a substituent; and L_3 represents a chemical bond or a divalent linkage group, provided that when L_3

represents a chemical bond, at least one of R_{1037}, R_{1038}, R_{1045}, and R_{1046} is a substituent.

16. (Original) The organic electroluminescent element of claim 12, wherein the carbazole derivative is a compound represented by the following formula 14,

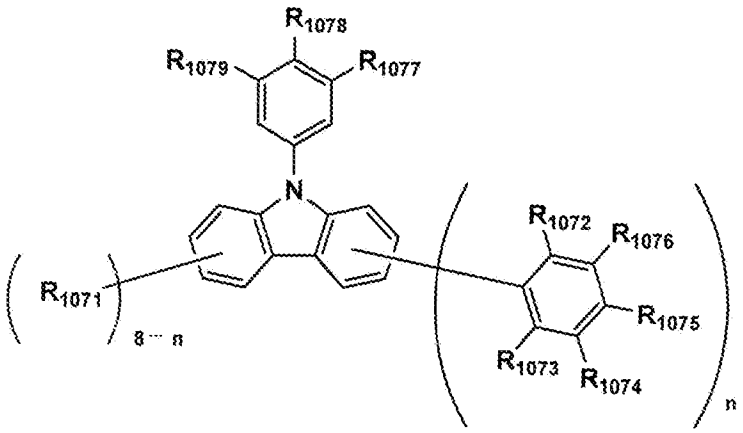
Formula 14



wherein R_{1051} through R_{1063} independently represent a hydrogen atom or a substituent, provided that at least one of R_{1057}, R_{1058}, R_{1062}, and R_{1063} is a substituent.

17. (Original) The organic electroluminescent element of claim 12, wherein the carbazole derivative is a compound represented by the following formula 15,

Formula 15



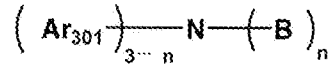
wherein R_{1071} through R_{1079} independently represent a hydrogen atom or a substituent, provided that at least one of R_{1072} and R_{1073} is a substituent; and n is an integer of from 1 to 8.

18. (Canceled)

19. (Cancelled)

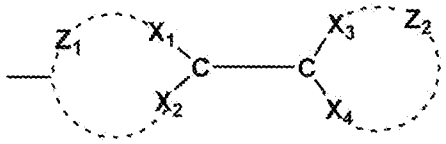
20. (Withdrawn-Previously Presented) The organic electroluminescent element of claim 1, wherein the triarylamine compound is a compound represented by the following formula 2,

Formula 2



wherein Ar_{301} represents a substituted or unsubstituted aryl group or a substituted or unsubstituted heteroaryl group; n is an integer of from 1 to 3; and B represents the following formula 3,

Formula 3

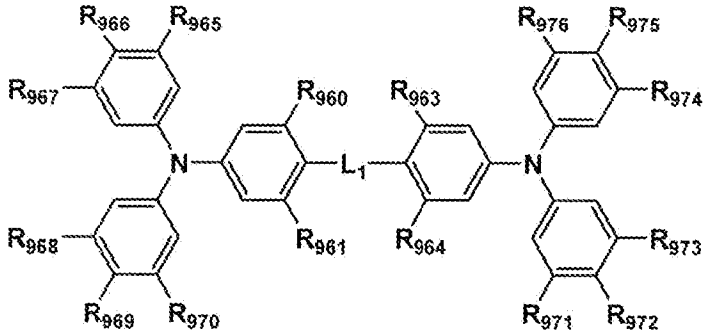


wherein Z_1 and Z_2 independently represent an atomic group necessary to form an aromatic hydrocarbon ring or an aromatic heterocyclic ring; and X_1 through X_4 independently represent N, O, S or C-R_{301} in which R_{301} represents a hydrogen atom or a substituent, provided that at least one of X_1 through X_4 represents C-R_{301} in which R_{301} represents a substituent.

21. (Cancelled)

22. (Withdrawn - Previously Presented) The organic electroluminescent element of claim 1, wherein the triarylamine compound is a compound represented by the following formula 5,

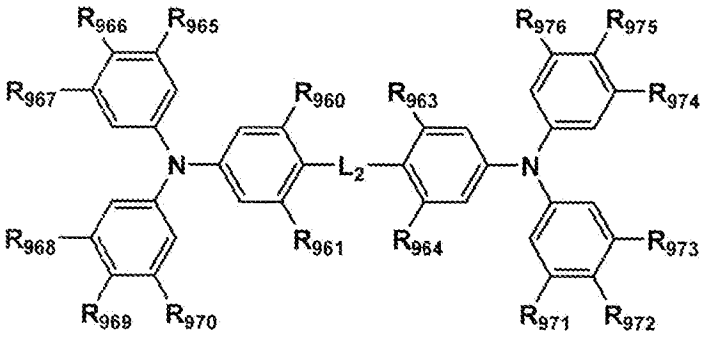
Formula 5



wherein R_{960} through R_{976} independently represent a hydrogen atom or a substituent, provided that at least one of R_{960} and R_{961} is a substituent and at least one of R_{963} and R_{964} is a substituent; and L_1 represents a chemical bond or a divalent linkage group.

23. (Withdrawn - Previously Presented) The organic electroluminescent element of claim 1, wherein the triarylamine compound is a compound represented by the following formula 6,

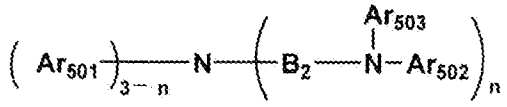
Formula 6



wherein R_{960} through R_{976} independently represent a hydrogen atom or a substituent; and L_2 represents an alkylene group, a cycloalkylene group or a fluoroalkylene group.

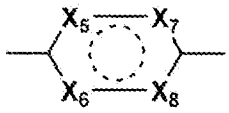
24. (Withdrawn - Previously Presented) The organic electroluminescent element of claim 1, wherein the triarylamine compound is a compound represented by the following formula 7,

Formula 7



wherein Ar_{501} through Ar_{503} independently represent a substituted or unsubstituted aryl group or a substituted or unsubstituted heteroaryl group; n is an integer of from 1 to 3; and B_2 represents the following formula 8,

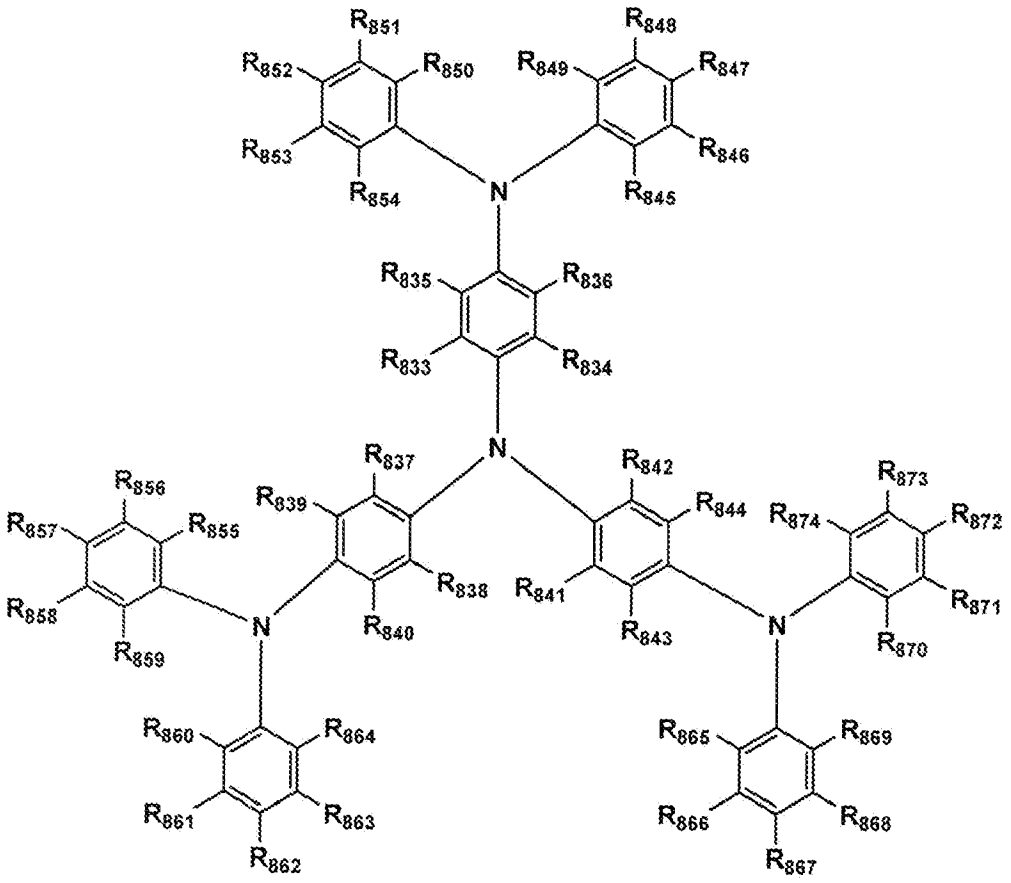
Formula 8



wherein X_5 and X_8 independently represent N or C-R_{501} in which R_{501} represents a hydrogen atom or a substituent, provided that at least one of X_5 and X_6 represents C-R_{501} in which R_{501} represents a substituent, and at least one of X_7 and X_8 represents C-R_{501} in which R_{501} represents a substituent.

25. (Withdrawn - Previously Presented) The organic electroluminescent element of claim 1, wherein the triarylamine compound is a compound represented by the following formula 9,

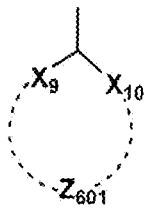
Formula 9



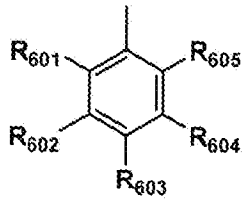
wherein R_{833} through R_{874} independently represent a hydrogen atom or a substituent, provided that at least one of R_{833} and R_{834} is a substituent, at least one of R_{835} and R_{836} is a substituent, at least one of R_{837} and R_{838} is a substituent, at least one of R_{839} and R_{840} is a substituent, at least one of R_{841} and R_{842} is a substituent, and at least one of R_{843} and R_{844} is a substituent.

26. (Withdrawn - Previously Presented) The organic electroluminescent element of claim 1, wherein the triarylamine compound comprises a terminal group represented by the following formula 10-1, 10-2, 10-3 or 10-4,

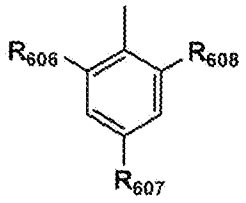
Formula 10-1



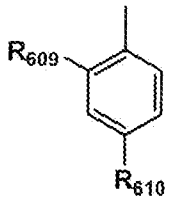
Formula 10-2



Formula 10-3



Formula 10-4

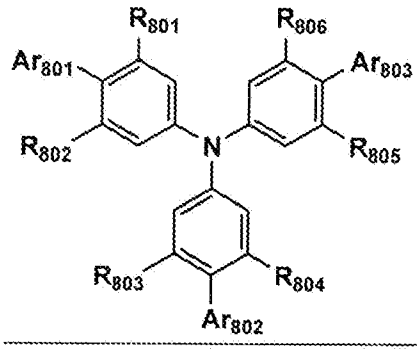


wherein X_9 and X_{10} independently represent N, O, S or CR_{611} in which R_{611} represents a hydrogen atom or a substituent, provided that at least one of X_9 and X_{10} represents CR_{611} in which R_{611} represents a substituent; Z_{601} represents an atomic group

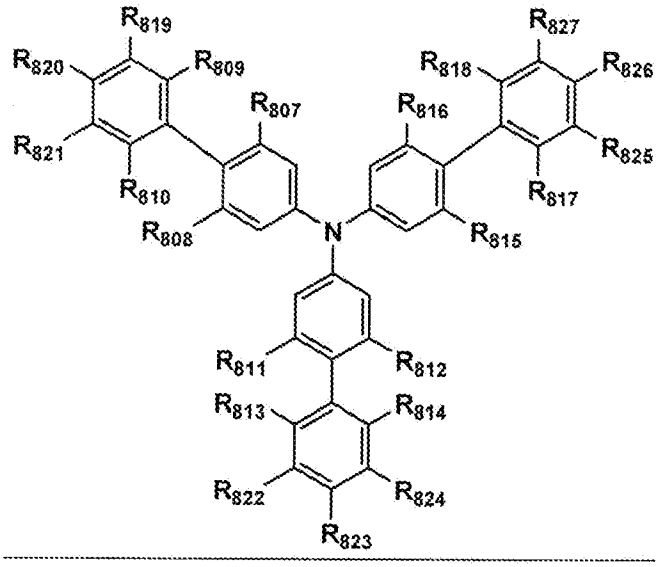
necessary to form an aromatic hydrocarbon ring or an aromatic heterocyclic ring; R_{601} through R_{605} independently represent a hydrogen atom or a substituent, provided that at least one of R_{601} and R_{605} is a substituent; and R_{606} through R_{610} independently represent a substituent.

27. (Currently Amended) An organic electroluminescent element comprising a light emission layer containing a phosphorescent compound and a hole transporting layer adjacent thereto containing a hole transporting material, wherein the hole transporting material is a triarylamine compound represented by the following Formula 4-1 or 4-2:

Formula 4-1



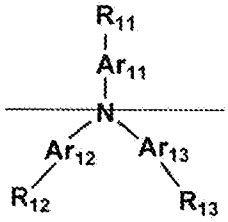
Formula 4-2



wherein Ar_{801} through Ar_{803} independently represent a substituted or unsubstituted aryl group or a substituted or unsubstituted heteroaryl group; and R_{801} through R_{827} independently represent a hydrogen atom or a substituent, provided that at least one of R_{801} and R_{802} is a substituent, at least one of R_{803} and R_{804} is a substituent, at least one of R_{805} and R_{806} is a substituent, at least one of R_{807} through R_{810} is a substituent, at least one of R_{811} through R_{814} is a substituent, and at least one of R_{815} through R_{818} is a substituent.

~~by the following formula 1,~~

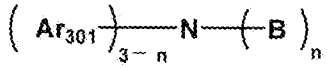
~~Formula 1~~



~~wherein Ar_{11} through Ar_{13} independently represent a substituted or unsubstituted aryl group or a substituted or unsubstituted heteroaryl group; R_{11} through R_{13} independently represent a hydrogen atom or a substituent, provided that at least one of R_{11} through R_{13} is a substituent.~~

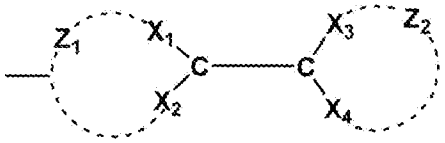
28. (Original) The organic electroluminescent element of claim 27, wherein the triarylamine compound is a compound represented by the following formula 2,

Formula 2



wherein Ar_{301} represents a substituted or unsubstituted aryl group or a substituted or unsubstituted heteroaryl group; n is an integer of from 1 to 3; and B represents the following formula 3,

Formula 3

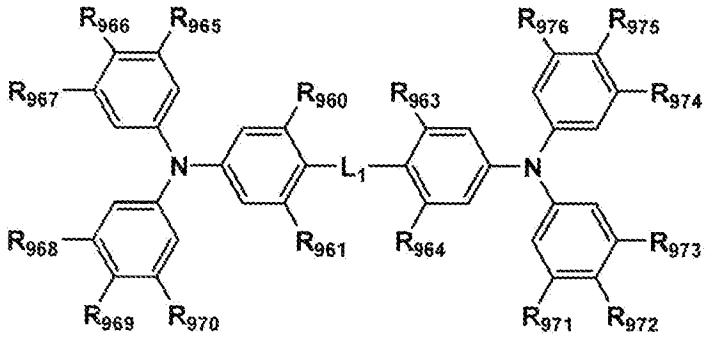


wherein Z_1 and Z_2 independently represent an atomic group necessary to form an aromatic hydrocarbon ring or an aromatic heterocyclic ring; and X_1 through X_4 independently represent N, O, S or C-R_{301} in which R_{301} represents a hydrogen atom or a substituent, provided that at least one of X_1 through X_4 represents C-R_{301} in which R_{301} represents a substituent.

29. (Cancelled)

30. (Original) The organic electroluminescent element of claim 27, wherein the triarylamine compound is a compound represented by the following formula 5,

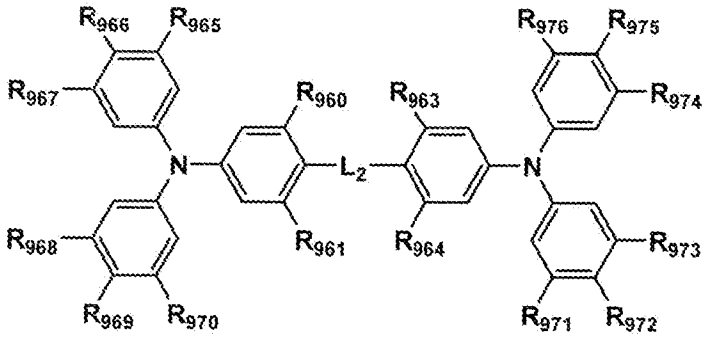
Formula 5



wherein R_{960} through R_{976} independently represent a hydrogen atom or a substituent, provided that at least one of R_{960} and R_{961} is a substituent, and at least one of R_{963} and R_{964} is a substituent; and L_1 represents a chemical bond or a divalent linkage group.

31. (Original) The organic electroluminescent element of claim 27, wherein the triarylamine compound is a compound represented by the following formula 6,

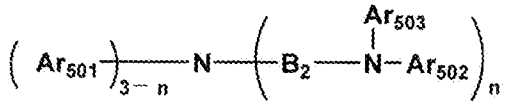
Formula 6



wherein R_{960} through R_{976} independently represent a hydrogen atom or a substituent; and L_2 represents an alkylene group, a cycloalkylene group or a fluoroalkylene group.

32. (Original) The organic electroluminescent element of claim 27, wherein the triarylamine compound is a compound represented by the following formula 7,

Formula 7



wherein Ar_{501} through Ar_{503} independently represent a substituted or unsubstituted aryl group or a substituted or unsubstituted heteroaryl group; n is an integer of from 1 to 3; and B_2 represents the following formula 8,

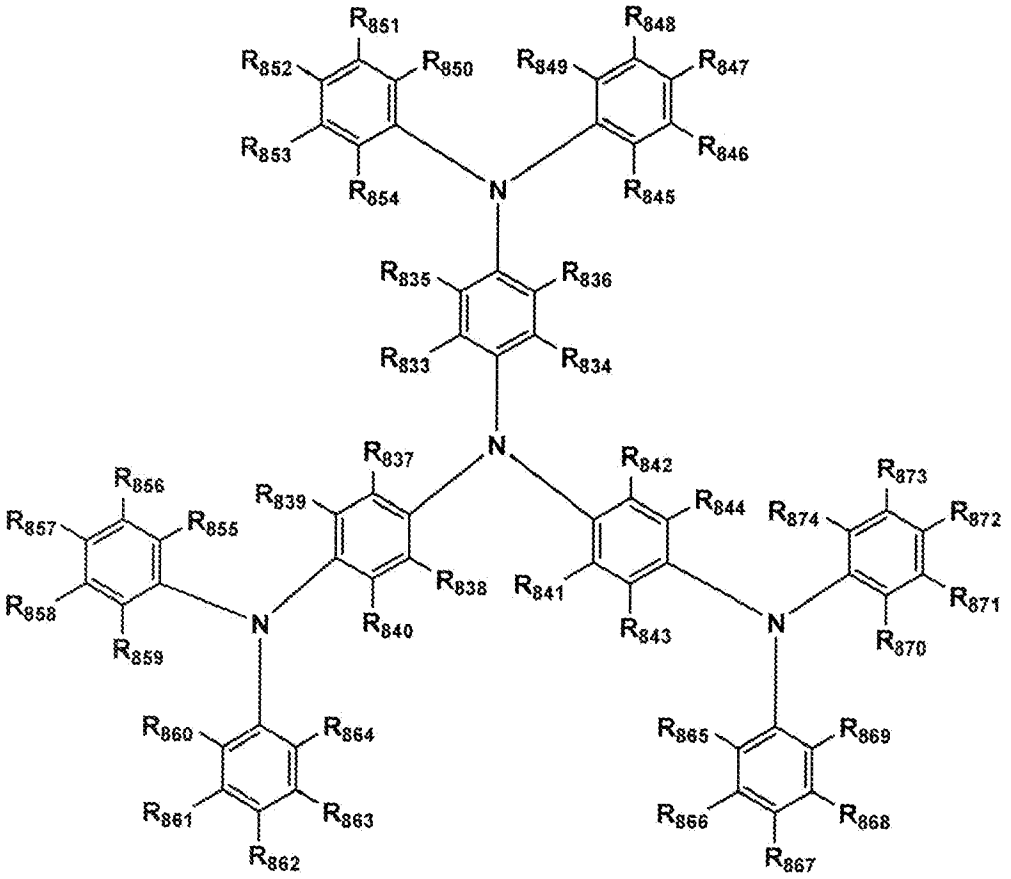
Formula 8

wherein X_5 and X_8 independently represent N or C-R_{501} in which R_{501} represents a hydrogen atom or a substituent, provided that at least one of X_5 and X_6 represents C-

R_{501} in which R_{501} represents a substituent, and at least one of X_7 and X_8 represents C-R_{501} in which R_{501} represents a substituent.

33. (Original) The organic electroluminescent element of claim 27, wherein the triarylamine compound is a compound represented by the following formula 9,

Formula 9

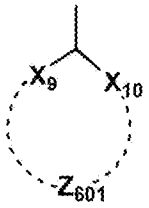


wherein R_{833} through R_{874} independently represent a hydrogen atom or a substituent, provided that at least one of R_{833} and R_{834} is a substituent, at least one of R_{835} and R_{836} is a substituent, at least one of R_{837} and R_{838} is a substituent, at least one of R_{839} and

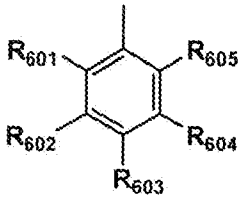
R_{840} is a substituent, at least one of R_{841} and R_{842} is a substituent, and at least one of R_{843} and R_{844} is a substituent.

34. (Original) The organic electroluminescent element of claim 27, wherein the triarylamine compound is a compound having a terminal group represented by the following formula 10-1, 10-2, 10-3 or 10-4,

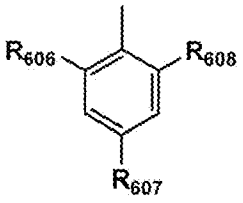
Formula 10-1



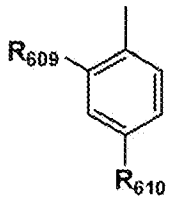
Formula 10-2



Formula 10-3



Formula 10-4



wherein X_9 and X_{10} independently represent N, O, S or CR_{611} in which R_{611} represents a hydrogen atom or a substituent, provided that at least one of X_9 and X_{10} represents CR_{611} in which R_{611} represents a substituent; Z_{601} represents an atomic group necessary to form an aromatic hydrocarbon ring or an aromatic heterocyclic ring; R_{601} through R_{605} independently represent a hydrogen atom or a substituent, provided that at least one of R_{601} and R_{605} is a substituent; and R_{606} through R_{610} independently represent a substituent.

35. (Original) The organic electroluminescent element of claim 27, wherein the hole transporting material has a molecular weight of not less than 550.

36. (Original) The organic electroluminescent element of claim 27, wherein the hole transporting material has an ionization potential Ip1 of from 5.00 to 5.70 eV.

37. (Original) The organic electroluminescent element of claim 27, wherein

$-0.1\ (eV) \leq Ip3-Ip1 \leq 0.5\ (eV)$

where Ip1 (eV) represents the ionization potential of the hole transporting material, and Ip3 (eV) represents the ionization potential of the phosphorescent compound.

38. (Original) The organic electroluminescent element of claim 27, wherein

$0.5\ (eV) < T3 - Ea1 < 1.3\ (eV)$

where T3 (eV) represents the excited triplet energy level of the phosphorescent compound and Ea1 (eV) represents the electron affinity of the hole transporting material.

39. (Original) The organic electroluminescent element of claim 27, wherein the phosphorescent compound has a phosphorescence maximum in the wavelength regions of from 380 to 480 nm.

40. (Original) The organic electroluminescent element of claim 27, further comprising a second hole transporting layer containing a second hole transporting material, the second hole transporting layer being provided on the surface of the hole transporting layer opposite the light emission layer, wherein

$0.1\ (eV) < Ip1 - Ip4 < 0.7\ (eV)$

where Ip1 (eV) represents the ionization potential of the hole transporting material, and Ip4 (eV) represents the ionization potential of the second hole transporting material.

41. (Original) The organic electroluminescent element of claim 40, wherein the thickness of the hole transporting layer adjacent to the light emission layer is from 5 to 20 nm.

42. (Original) The organic electroluminescent element of claim 27, wherein the light emission layer further contains a host compound.

43. (Original) The organic electroluminescent element of claim 27, wherein

$0.3\ (eV) < Ip2 - Ip1 < 1.0\ (eV)$

where Ip1 (eV) represents the ionization potential of the hole transporting material and Ip2 (eV) represents the ionization potential of the host compound.

44. (Original) The organic electroluminescent element of claim 27, wherein

$0.1\ (eV) < Ea2 - Ea1 < 0.8\ (eV)$

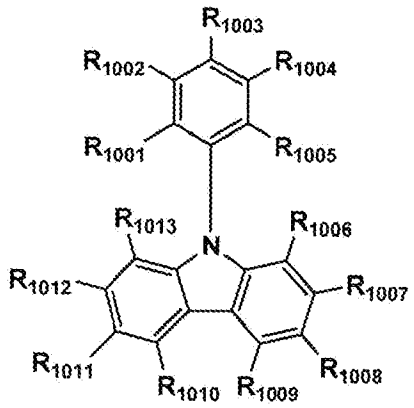
where Ea1 (eV) represents the electron affinity of the hole transporting material and Ea2 (eV) represents the electron affinity of the host compound.

45. (Original) The organic electroluminescent element of claim 27, wherein the host compound has a 0-0 band of the phosphorescence spectra of from 300 to 450 nm.

46. (Original) The organic electroluminescent element of claim 27, wherein the host compound is a carbazole derivative.

47. (Original) The organic electroluminescent element of claim 46, wherein the carbazole derivative is a compound represented by the following formula 11,

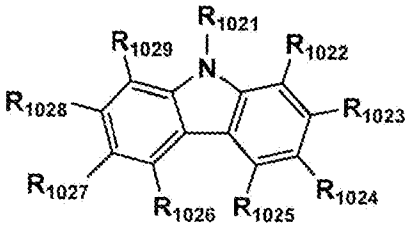
Formula 11



wherein R_{1001} through R_{1013} independently represent a hydrogen atom or a substituent, provided that at least one of R_{1001} through R_{1013} is a substituent.

48. (Withdrawn) The organic electroluminescent element of claim 46, wherein the carbazole derivative is a compound represented by the following formula 12,

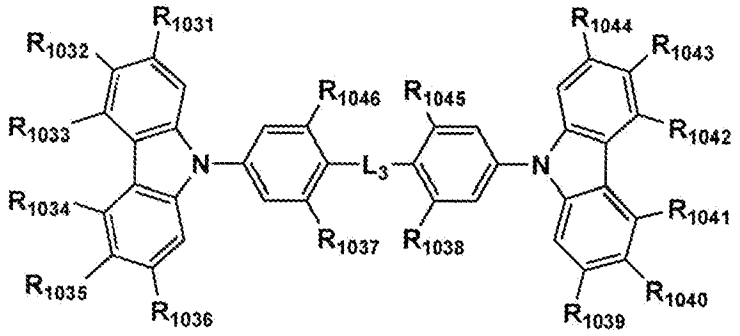
Formula 12



wherein R_{1021} represents an alkyl group, a cycloalkyl group or a fluoroalkyl group; and R_{1022} through R_{1029} independently represent a hydrogen atom or a substituent, provided that at least one of R_{1022} through R_{1029} is a substituent.

49. (Withdrawn) The organic electroluminescent element of claim 46, wherein the carbazole derivative is a compound represented by the following formula 13,

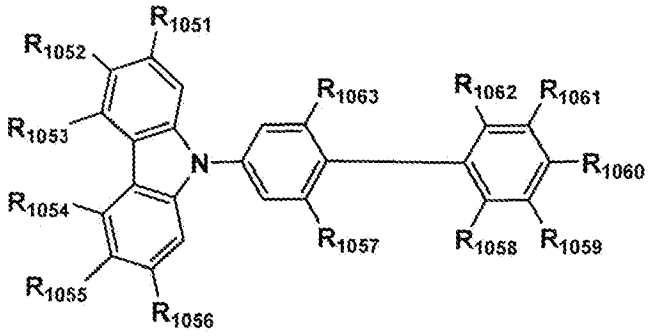
Formula 13



wherein R_{1031} through R_{1046} independently represent a hydrogen atom or a substituent; and L_3 represents a chemical bond or a divalent linkage group, provided that when L_3 represents a chemical bond, at least one of R_{1037}, R_{1038}, R_{1045}, and R_{1046} is a substituent.

50. (Withdrawn) The organic electroluminescent element of claim 46, wherein the carbazole derivative is a compound represented by the following formula 14,

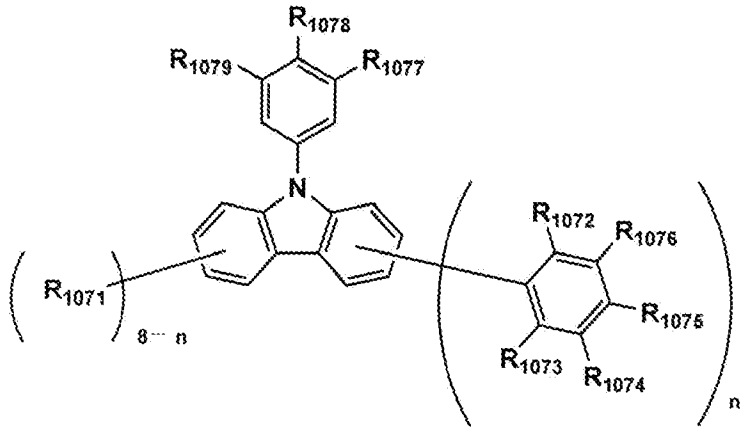
Formula 14



wherein R_{1051} through R_{1063} independently represent a hydrogen atom or a substituent, provided that at least one of R_{1057}, R_{1058}, R_{1062}, and R_{1063} is a substituent.

51. (Withdrawn) The organic electroluminescent element of claim 46, wherein the carbazole derivative is a compound represented by the following formula 15,

Formula 15



wherein R_{1071} through R_{1079} independently represent a hydrogen atom or a substituent, provided that at least one of R_{1072} and R_{1073} is a substituent; and n is an integer of from 1 to 8.

52. (Original) The organic electroluminescent element of claim 1, wherein the hole transporting layer is formed according to a vacuum deposition process.

53. (Original) The organic electroluminescent element of claim 1, wherein the hole transporting layer is formed according to a wet process.

54. (Original) A display comprising the organic electroluminescent element of claim 1.

55. (Original) An illuminator comprising the organic electroluminescent element of claim 1.

56. (Original) A display comprising the illuminator of claim 55, and a liquid crystal element as a displaying means.

57. (Previously Presented) The organic electroluminescent element of claim 1, wherein in Formula 4-1 or 4-2, the substituent of R_{801} through R_{827} represents an alkyl group, a cycloalkyl group, an alkenyl group, an alkinyl group, a substituted or unsubstituted aryl group, a substituted or unsubstituted heteroaryl group, a substituted or unsubstituted saturated heterocyclic group, an alkoxy group, a cycloalkoxy group, an aryloxy group, an alkylthio group, a cycloalkylthio group, an arylthio group, an alkoxycarbonyl group, an aryloxycarbonyl group, a sulfamoyl group, an acyl group, an acyloxy group, an amido group, a carbamoyl group, a ureido group, a sulfonyl group, an alkylsulfonyl group or an arylsulfonyl group, an amino group, a halogen atom, a fluorinated hydrocarbon group, a cyano group, a nitro group, a hydroxyl group, a mercapto group, or a silyl group.

58. (Previously Presented) The organic electroluminescent element of claim 13, wherein the substituent represented by R_{1001} through R_{1013} of formula 11 independently represents an alkyl group, a cycloalkyl group, an alkenyl group, an alkinyl group, a substituted or unsubstituted aryl group, a substituted or unsubstituted heteroaryl group, a substituted or unsubstituted saturated heterocyclic group, an alkoxy group, a cycloalkoxy group, an aryloxy group, an alkylthio group, a cycloalkylthio group, an arylthio group, an alkoxycarbonyl group, an aryloxycarbonyl group, a sulfamoyl group, an acyl group, an acyloxy group, an amido group, a carbamoyl group, a ureido group, a sulfonyl group, an alkylsulfonyl group or an arylsulfonyl group, a halogen atom, a fluorinated hydrocarbon group, a cyano group, a nitro group, a hydroxyl group, a mercapto group, or a silyl group.